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The following <u>Listing of the Claims</u> will replace all prior versions and all prior listings of the claims in the present application:

## **Listing of The Claims:**

- 1. (Previously Presented) A method for preparing a microarray of frozen tissue and/or cell samples comprising the steps of:
  - (a) obtaining a donor sample from a donor block comprising a tissue or cell sample embedded in frozen embedding material;
  - (b) providing a recipient block comprising a frozen embedding material;
  - (c) providing a tissue microarrayer comprising a cooling chamber for receiving the recipient block and maintaining the recipient block in a frozen condition; said cooling chamber moveable in an x- and y- direction relative to a fixed horizontal surface;
  - (d) generating a hole in said recipient block sized to receive said donor sample;
  - (e) filling said hole in said recipient block with said donor sample;
  - (f) repeating steps (a)-(e) to create a microarray block comprising a plurality of donor tissue and/or cell samples embedded in a block of frozen embedding material, each of said donor samples having a known location in said block;
  - (g) sectioning said microarray block to generate a section comprising portions of said plurality of donor samples, each portion of each donor sample at a different sublocation in the section at coordinates corresponding to coordinates of the donor sample in the microarray block from which each portion was obtained; and
  - (h) placing said section on a substrate such that said portions at different sublocations are stably associated with said substrate, thereby generating said microarray.

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2. (Original) The method according to claim 1, wherein said microarray block comprises about 10 to about 1200 samples.

- 3. (Original) The method according to claim 1, wherein at least one of said donor samples is a tissue sample.
- 4. (Original) The method according to claim 1, wherein at least one of said donor samples is a cell sample.
- 5. (Canceled)
- 6. (Canceled)
- 7. (Previously Presented) The method according to claim 1, wherein said obtaining is performed by using a coring needle comprising a cutting edge and wall defining a lumen to core a donor sample.
- 8. (Previously Presented) The method according to claim 7, wherein said core is in the shape of a cylinder.
- 9. (Original) The method according to claim 8, wherein said core is about 0.3 mm in diameter.
- 10. (Original) The method according to claim 8, wherein said core is about 0.6 mm in diameter.
- 11. (Original) The method according to claim 8, wherein said core is greater than about 0.6 mm.
- 12. (Previously Presented) A method of generating a microarray block, comprising the steps of:
  - (a) obtaining a donor sample from a donor block comprising a tissue or cell sample embedded in frozen embedding material;
  - (b) providing a recipient block comprising a frozen embedding material,
  - (c) providing a tissue microarrayer comprising a cooling chamber for receiving the recipient block and maintaining the recipient block in a frozen condition; said

Serial No.: 09/888,362 Page 4 cooling chamber moveable in an x- and y- direction relative to a fixed horizontal surface; generating a hole in said recipient block with the at least one coring needle (d) wherein the hole is sized to receive said frozen donor sample; and (e) filling said hole with said donor sample. The method according to claim 12, further comprising repeating 13. (Previously presented) steps (a) to (e) multiple times. The method according to claim 1 or 13, wherein said method is 14. (Previously presented) automated. 15. (Original) The method according to claim 14, wherein information relating to the location of each donor sample in said recipient block is stored in a database. 16. (Canceled) 17. (Canceled) 18. (Canceled) 19. (Canceled) 20. (Canceled) 21. (Canceled)

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